REMARKS

Claims 22-24 are newly added and Claims 1-13 are canceled. Thus, Claims 14-24 are currently pending in this application with Claims 14, 20 and 21 being independent.

The Official Action rejects Claims 14, 15, 20 and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,390,003, hereinafter *Yamaguchi*; Claims 16-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamaguchi* in view of the background of the instant invention, hereinafter *Background*; Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamaguchi* in view of U.S. Patent No. 5,898,795, hereinafter *Bessho*.

Objections

On the top of page two of the Official Action, a number of issues are raised regarding grammar of Claims 14-21. Accordingly, the claims are amended thereby addressing these issues.

On the middle of page two of the Official Action, the specification is objected to because of the presence of numerous grammatical issues. Accordingly, Applicant has carefully reviewed the specification and amended such to address these issues.

Rejections

The Official Action rejects Claims 14, 15, 20 and 21 as being unpatentable over *Yamaguchi*.

Yamaguchi discloses a copying system for preventing copying copy-prohibited images. Basically, *Yamaguchi* is concerned with persons making copies

of bills, checks, or notes (currency). To prevent such copying, *Yamaguchi* discloses a device that detects marks on currency, and upon detection of such a mark, prints "invalid" on the copy where the mark would otherwise be reproduced. As described in columns 11 and 12 and shown in Fig. 10 of *Yamaguchi*, "[t]he image data sent to the bill recognition processing section 67 is compared with the reference image data in a pattern-matching portion (preliminary decision)" (column 11, lines 57-59). That is, the peripheral circular outline of the pattern is first detected (column 11, lines 53-54). "If it is decided at step S1009 that the former is not coincident with the latter, it is decided that the original is not a bill" (column 11, lines 63-65). "However, if it is decided at step S1009 that the former is coincident with the latter, there is a possibility that the original document is a bill. Therefore, the main decision is made" (column 12, lines 3-6). The "main decision" entails sequential comparison of the image data stored in the bit map memory with each of the reference image data as shown in Fig. 10. That is, there are a number of images (the same pattern at different angles of rotation) that are compared with the scanned image. *Yamaguchi* does not provide any description beyond generally stating that the image data is compared with the saved images.

Some of the differences between the claimed subject matter and *Yamaguchi's* disclosure have to do with the recognition of a partial image that is contained in binary image data, from a pixel-block area having a predetermined size and containing a target pixel in the binary image data, based on at least one of the conditions concerning the pixels at the opposite vertices, the pixels on the outermost lines of the pixel-block area, and the pixels on the opposite sides on the outermost

lines of the pixel-block area. Subject matter along these lines is included in Claims 14, 20 and 21.

Yamaguchi does not disclose the recognition of a partial image in a pixel-block area containing a target-pixel as defined by Claims 14, 20 or 21. That is, there is no indication in *Yamaguchi* that the image includes what would have been considered to be a "target pixel". In fact, the Official Action makes no attempt to reconcile this point and does not point out where or how *Yamaguchi* discloses this feature. Thus, should the rejections be maintained, it is requested that it be specifically pointed out or explained how or where *Yamaguchi* refers to a target pixel.

Also, *Yamaguchi* does not disclose recognition of a partial image that is contained in binary image data based on at least one of the conditions concerning the pixels at the opposite vertices, the pixels on the outermost lines of the pixel-block area, and the pixels on the opposite sides on the outermost lines of the pixel block. For example, in Fig. 10 *Yamaguchi* shows patterns represented in pixel blocks, i.e., the "bit map memory" and pattern P1-P8. As described in column 11, line 54, the initial decision is based on the circular outline at the <u>periphery of the pattern</u>, not the outermost line of the pixel block. The Official Action proposes that because *Yamaguchi* detects the peripheral outline of a pattern in a pixel block, i.e., the pattern in the middle of the "bit map memory" and patterns P1-P8, that *Yamaguchi* discloses the claimed subject matter relating to the "outermost lines of the pixel block". However, *Yamaguchi's* detection is based on the outermost pixels of the <u>pattern</u>, which are not the outermost lines of the pixel blocks shown in *Yamaguchi*.

For at least the reasons stated above, *Yamaguchi* does not anticipate Claims 14, 20 or 21.

Claim 15 is allowable at least by virtue of its dependence from allowable independent Claim 14 and because it defines features that additionally distinguish over the cited document.

The Official Action Rejects Claims 16-18 as being unpatentable over *Yamaguchi* in view of the *Background*. As relied upon in the Official Action, the *Background* does not satisfy the deficiencies of the rejection of Claim 14 noted earlier. Therefore, Claims 16-18 depend from Claims 14 and are allowable at least for the same reasons, and also because they define features that additionally distinguish over the cited documents. For example, Claims 16-18 refer to the numbers of OFF-pixels and ON-pixels. There is no disclosure in *Yamaguchi* of using the numbers of OFF-pixels and ON-pixels to recognize a partial image.

Claim 19 is rejected as being unpatentable over *Yamaguchi* in view of *Bessho*. As relied on in the Official Action, *Bessho* does not remedy the deficiencies of the rejection of Claim 14 noted above. Therefore, Claim 19 depends from Claim 14 and is allowable for at least the same reasons, and also because it defines features that further define over the cited documents.

New Claims

New Claims 22-24 are added and generally define that the conditions concerning the pixels are the binary values of the pixels. The cited documents do not disclosure this subject matter in combination with the other claimed features.
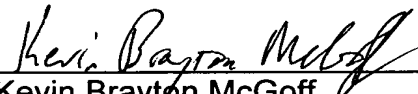
Conclusion

For at least the reasons stated above, it is requested that all the objections

and rejections be withdrawn and that this application be allowed.

Should any questions arise in connection with this application, or should the

examiner feel that a teleconference would be helpful in resolving any remaining

issues pertaining to this application, the undersigned respectfully requests that he be

contacted at the number indicated below.

Respectfully submitted,

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